REMARKS

Applicants have reviewed and considered the Office Action mailed on <u>December 23,</u> <u>2005</u>, and the references cited therewith.

No claims are amended, canceled, or added; as a result, claims <u>1, 6-11, 14, 15, 19, 20, 22,</u> <u>23, 28, and 30-44</u> are now pending in this application.

'103 Rejection of the Claims

Claims <u>1, 6-8, 11, 14, 19-20, 22, 32-33, 38 and 40-41</u> were rejected under 35 USC ' 103(a) as being unpatentable over <u>Okada</u> (U.S. Patent No. 6, 275, 917) in view of <u>James et al.</u> (U.S. Patent No. 6,026,472) and further in view of Chauvel (U.S. Patent No. 6,779,085). Applicants respectfully traverse this rejection. Applicants respectfully submit that a *prima facie* case of obviousness has not been presented for the reasons discussed below.

The combination does not render the claimed invention obvious

The Office Action alleges that Chauvel "teaches that the value of the page usage metric (i.e. the task-id value included with the memory access request) is compared with (sum of) values of page usage metrics for a plurality of other processes (i.e. the selected translated memory address) to determine if they are identical." See page 3 of the Office Action.

Applicants respectfully disagree. In making the above assertion, the Examiner has equated the "page usage metric" of the instant application with the "task-id" of Chauvel; and has also equated "values of page usage metrics for a plurality of other processes" of the instant application with "the selected translated memory address" of Chauvel. Applicants respectfully submit that there is no basis for equating the cited elements of the instant application and Chauvel.

The task-id of Chauvel is an identifier that equates a TLB entry with the task (process) responsible for its generation. As stated in Chauvel, "with the task-ID, all entries in a TLB belonging to a specific task can be identified" See column 8, lines 62-63. Chauvel further states that "[t]he Task-ID indicates which of the tasks (or processes) of this resource is doing the

access" at column 12, lines 16-17; and that "task IDs are not extension fields of the virtual address (VA) but simply address qualifiers" at column 8, lines 37-39.

The task-id of Chauvel is created when the task is spawned, and does not change with page accesses and so cannot represent a page usage metric. As stated in Chauvel, "[t]ypically, the OS uses a 32-bit task-ID that is in fact an address that enables the OS to locate task information (TCB)." See column 10, line 67 to column 11, line 2. See also Table 4 of Chauvel.

Further, the Office Action equates the task-id comparison of Chauvel with comparing a page usage metric and a sum of page usage metrics as recited in claim 6 of the instant application. Applicants respectfully submit that to sum task-ids of Chauvel as suggested in the Office Action would render Chauvel inoperative because the task-ids are not numerically related in any way and their sum is meaningless.

As discussed above, the task-id of Chauvel is an identifier that identifies a task or process. The task-id does not change with page accesses or page usage. Applicants respectfully submit that the cited portions of Chauvel simply describe a mechanism to correlate TLB entries with tasks or processes, and that task-ids have nothing to do with page usage metrics. Accordingly, applicants respectfully submit that Chauvel does not teach as alleged in the Office Action.

Claims 9-10 and 34-35 were rejected under 35 USC ' 103(a) as being unpatentable over Okada (U.S. Patent No. 6,275,917) in view of James et al. (U.S. Patent No. 6,026,472) and further in view of Chauvel (U.S. Patent No. 6,779,085). Applicants respectfully traverse this rejection on the basis that a *prima facie* case of obviousness has not been presented for the same reasons as provided above with respect to the rejection of claims 1, 6-8, 11, 14, 19-20, 22, 32-33, 38 and 40-41.

Claims 15, 23, 31, 36-37, 39 and 42 were rejected under 35 USC ' 103(a) as being unpatentable over Okada (U.S. Patent No. 6, 275, 917) in view of James et al. (U.S. Patent No. 6,026,472) and Chauvel (U.S. Patent No. 6,779,085) and further in view of Gaither (U.S. Patent No. 6,223,256). Applicants respectfully traverse this rejection on the basis that a *prima facie*

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case of obviousness has not been presented for the same reasons as provided above with respect to the rejection of claims 1, 6-8, 11, 14, 19-20, 22, 32-33, 38 and 40-41.

Claims 28, 30 and 43-44 were rejected under 35 USC ' 103(a) as being unpatentable over Greene (U.S. Publication No. 2004/0139473) in view of Okada (U.S. Patent No. 6, 275, 917) in view of James et al. (U.S. Patent No. 6,026,472) and further in view of Chauvel (U.S. Patent No. 6,779,085). Applicants respectfully traverse this rejection on the basis that a *prima facie* case of obviousness has not been presented for the same reasons as provided above with respect to the rejection of claims 1, 6-8, 11, 14, 19-20, 22, 32-33, 38 and 40-41.

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Conclusion

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (952-473-8800) to facilitate prosecution of this application.

Respectfully submitted,

MOINUL H. KHAN ET AL.

By their Representatives,

Customer Number 45445
952-473-8800

Date 3-15-06

By Dana B. LeMoine
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O.Box 1450, Alexandria, VA 22313-1450, on this 15 day of March, 2006.

MEREDITH MESCHER

Meredith Mescher

Name

Signature